

Use Attainability Analysis

for

WBID 1305 Mulberry Creek

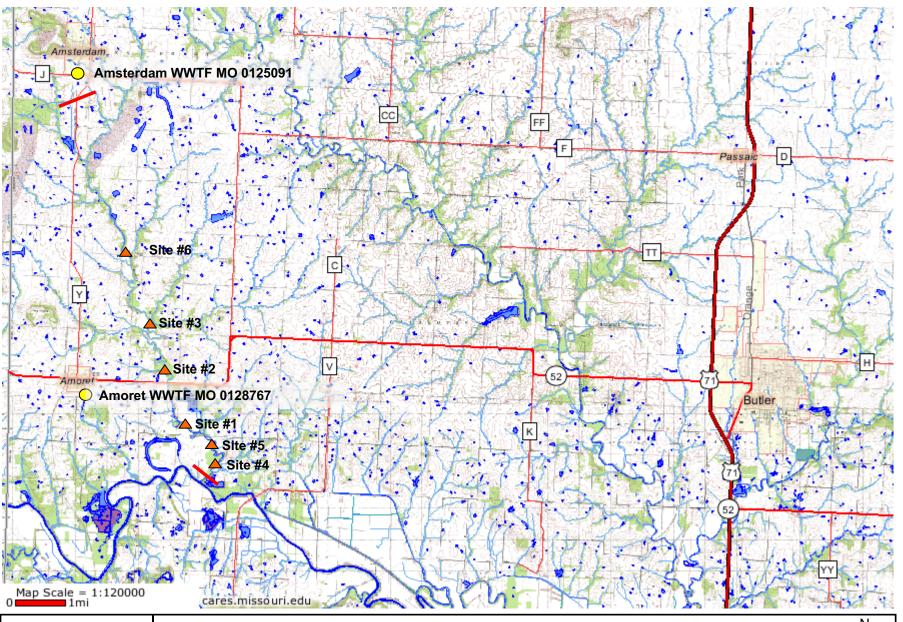
Submitted by BWR

July 11, 2007

Submitted to:
Missouri Department of Natural Resources
Division of Environmental Quality
Water Protection Program

Field Data Sheets for Recreational Use Stream Surveys

I Water Rody Info	rmation (For water body b		ody Identification	
	ne (from USGS 7.5' quad)			
	Body Identification (WBII			
) Nulliber.		
8-digit HUC: 1	0290102		County: BATES	
Upstream Legal	Description (from Table I	I): MONH		
Downstream Leg	gal Description(from Table	eH): 19,3	8 N , 30 W	
Number of sites	evaluated 6 CRos	5 SECTION	15	
List all sites nun	bers, listed consequently	upstream to d	lownstream:	
	6,3,2,1,5	, 4	5	
Site Locations Ma	p(s): Attach a map of enti	re segment w	ith assessment sites clearly labeled. Mark	
any other items tha	t may be of interest.			
TT C-1	(C11 41.' 4: 4 - 1			
11. Subegmentatio	in (init this section out only	y in cases wh	ere subesgmentation is being proposed)	4 iy
Upstream Coord			Downstream Coordinates:	
UTM X	Y		UTM X	Name of the last
	Global Positioning System (GPS)			
Static Mode	the stand with a substantial To stand the stand of Anni Schooling at		Topographic Map or DRG	4 1 4 4 4 5
Dynamic Mode (Kir	nematic)		Aerial Photograph or DOQQ	à)
Precise Positioning	Service		Satellite Imagery	1-
Signal Averaging			Interpolation Other	(40)
Real Time Different	tial Processing			
	the desired a control of the desired and the control of the contro	3 (Tagain an 1811 + 1812)	Interpolation Data Quality	
FOM	± Meters		Source Map Scale: 1:24,000 1:100,000 Other	
EPE	± Feet or ±	Meters		u.
PDOP			±Feet or ±Meters	
III. Discharger Fac	cility Information (list all	permitted disc		
	lity Name(s): AMSTEED)
Discharger Per	nit Number(s): MoØ17	r~a1		
Discharger 1 cm	MODIZS		8	
IV. UAA Surveyor	(please print legibly)			
	VOT ALEX BAPTLETT		Telephone Number: 816.363.7696	
Organization/E	mployer: BWR CORP.			Participants
Position: ENV	IRONMENTAL SCIENT	IST		
Diagram of Cardhad	·			i.e.,
complete.	you have completed all so	ections, enec	ked all applicable boxes and that everything i	IS
	21111		1	
Signed:			Date: 6 75 07	
February 5, 20	07		Page 22	





Mulberry Creek WBID #1305



	-		(must be	completed	for each	site)		191 T
Date & Time:	2 NOON	5/1	8107				., road crossing):	
Personnel (Data Co	llectors): MW	k Grif	Fith	UPS	TREAM F	ROM B	RIDGE CROSSII	JG ON COUNTY ROAT
Current Weather Co	onditions: Sun	nu-	750 F	Facility	Name: An	nsterdo Amores	M WWIF,	
Weather Conditions	s for Past 10 days:	Q		Permit 1	Number:	N	0 0125091, MD 01287107	N N
Drought Conditions	2: No drought	Phase I	Phase II □	Phase III	l. Phasa IV [
e Locations:							JWII L	8
LOCATION COORDIN							e de la companya de	
Site GPS Coordin						MAN NAM	141 94.54	3
HORIZONTAL COLL	ECTION METHOD (In Global Positionin			termine the lo	cational data.)		Interpolati	
Static Mode		g cyclom (J. J		Topographic	Map or Di		Oli .
Dynamic Mode (Kinem Precise Positioning Se				*	Aerial Photo Satellite Ima		OQQ	
Signal Averaging					Interpolation			
Real Time Differential	Processing					. Julio	and the second	
HORIZONTAL ACCUR	RACY ESTIMATE							
	GPS Date	a Quality					Interpolation Dat	a Quality
FOM	±	Meters			Source Map Scale: 1:24,000 1:100,000 Other			000 Other
EPE	±F6	eet or ±_	Meters			37.	Feet or ±	CASCID POSSIBLISHED THE CONTRACTOR OF THE CONTRA
PDOP							reet or ±_	ivieters
otos:	4			an Mila ang ang ang ang				
Ups	tream Photos	91	- 0 R	Downstream	Photos			Other Photos
Photo ID#	Photo Purpo	se	Photo ID#	F	Photo Purpose		Photo ID#	Photo Purpose
				1	7			
es Observed*:	(Uses actually	observe	ed at time o	f survey)				\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
No. 16					1		and the second s	I
☐ Swimming		n diving		CUBA divir	ng 🗆 Tub		ng	☐ Water skiing
		aking	□ B	oating		☐ Wading		☐ Rafting
☐ Wind surfing	☐ Kay		☐ Hunting ☐ Trapping ☐ Fig					
☐ Hunting	☐ Tra	pping		ishing	89	Non	e of the above	☐ Other:
☐ Hunting Describe: (Include	☐ Tra	pping uals recrea			of evidence	Non of recreat	e of the above ional uses, etc. U	☐ Other: se Data Sheet D- Recreat
☐ Hunting	☐ Tra	pping uals recrea			of evidence	Non of recreat	e of the above ional uses, etc. U	
☐ Hunting Describe: (Include Use Interview whe	number of individ	pping uals recrea views.)	ting, photo-doo	cumentation		of recreat	ional uses, etc. U	se Data Sheet D- Recreat
☐ Hunting Describe: (Include	☐ Tranumber of individen conducting inter	pping uals recrea views.)	ting, photo-doo	cumentation		of recreat	ional uses, etc. U	se Data Sheet D- Recreat
☐ Hunting Describe: (Include Use Interview wheeler)	□ Tra number of individ n conducting inter nditions*: (Ma	pping uals recrea views.)	ting, photo-doo	cumentation	recreationa	of recreat	ional uses, etc. U Attach photos	se Data Sheet D- Recreat
☐ Hunting Describe: (Include Use Interview wheele of interview of in	□ Tra number of individ n conducting inter nditions*: (Ma erest.) rks □ Pla	pping uals recrea views.) ark all tha ygrounds	at promote o	r impede	recreationa	of recreat	Attach photos	of evidence or Campgrounds
☐ Hunting Describe: (Include Use Interview wheele Inter	□ Tra number of individ n conducting inter nditions*: (Ma erest.) rks □ Pla es □ Sta	pping uals recrea views.) ark all tha ygrounds te parks	at promote o	r impede	recreationa	of recreat	Attach photos of an areas	of evidence or Campgrounds Stairs/walkway
☐ Hunting Describe: (Include Use Interview wheele Inter	□ Tra number of individ n conducting inter nditions*: (Ma erest.) rks □ Pla es □ Sta	pping uals recrea views.) ark all tha ygrounds te parks	at promote o	r impede	recreationa	of recreat	Attach photos	of evidence or Campgrounds
☐ Hunting Describe: (Include Use Interview wheele Inter	□ Tra number of individ n conducting inter nditions*: (Ma erest.) rks □ Pla es □ Sta	pping uals recrea views.) ark all tha ygrounds te parks	at promote o	r impede	recreationa	of recreat	Attach photos of an areas	of evidence or Campgrounds Stairs/walkway
☐ Hunting Describe: (Include Use Interview wheele Inter	□ Tra number of individ n conducting inter nditions*: (Ma erest.) rks □ Pla es □ Sta n □ Fer	pping uals recrea views.) ark all tha ygrounds te parks	at promote o	r impede	recreationa	of recreat	Attach photos of an areas	of evidence or Campgrounds Stairs/walkway
☐ Hunting Describe: (Include Use Interview wheele	□ Tra number of individ n conducting inter nditions*: (Ma erest.) rks □ Pla es □ Sta n □ Fer	pping uals recrea views.) ark all tha ygrounds te parks ace	at promote o	onservation al forests	recreationa	of recreat	Attach photos of an areas	of evidence or Campgrounds Stairs/walkway Other:

						0 CHAI	NNEL LEYLMUS
						Run =	10000
	~ * * * * * * * * * * * * * * * * * * *		1306	11	1	avels =	. 100 00
Page Two – Data tream Morpholog		WRID #	1000 : 5	T2 #	1	Pool =	
Upstream View's	Physical Dime	e nsions: Is	there any water p	resent at	this view	? □ Yes □ No	
			f so, is there an ol			□ Yes □ No	
Select one of the f	ollowing chan			JVIOUS CE	michti		
Channel Feature	Distance from		Width (m)	Lengt	lh (m)	Median Depth (m)	Max. Depth (m)
RIFFLE							
RUN							
POOL							
Downstream View Select one of the f	= -		If so, is there an	6 5 6		ew? Yes New Yes New Yes New Yes	
Channel Feature	Distance from		Width (m)	Lengt	th (m)	Median Depth (m)	Max. Depth (m)
RIFFLE						, , ,	
RUN							
POOL						715-00-00-00-00-00-00-00-00-00-00-00-00-00	
bstrate*: (These	values should ac	ld up to 100%	6.)				
% Cobble	e %	Gravel 5	% Sand		% Silt	% Mud/Clay	% Bedrock
ater Characteris	stics*: (Mark a	ll that apply.)				2
Odor:	☐ Sewage	☐ Musk	y □ Chemi	cal	None	☐ Other:	
Color:	□ Clear	☐ Green	☐ Gray		☐ Milky	Other:	Brown (tu
Bottom Deposit:	☐ Sludge		Fine se	diments	□ None	□ Other:	
Surface Deposit:	□ Oil	□ Scum	☐ Foam		None	☐ Other:	
omprehensive understatecision on the recreation on the recreation of the recreation	t to be used sole anding of water on use analysis b ou have comple	ly for remove conditions. On the conditions of t	al of a recreational Consequently, this is to conditions that tions, checked al	use designinformation need furth	on is not int ner analysis	ather is to provide a mended to directly influor that effect another and that everythin	use.
urveyor's Signature		#				1: 5 18107	
rganization: 8	WR CORP.			_ Positio	n: <u>En</u>	v.scl.	22

	WBID #		Sik#_1		
A	Distance from	Depth	Rank	Assigned Rank	Sorted depth
nsect 0	Stream edge	3 1 (- 5)			1
iscol #	Wetled width	0.1(0.2)		1 Channeltea	kire:
artz	TIOM	0.3		2	100
6 4		0.5		3	
Va	measurements	03		4 Dissolved O.	xygen
Banks	0.93/	0.3		5 ~	ΨU
7 6	apant	() (3		6	ppn-
0		0.3		7	10/5
89		(0.4)		8 7.1 m	91/ (17.1°C
lo		0.7		9	0.
		0.3		10	
ed W 1	wall to all	61161		11	
ed W	welled width	0.1(0.1)	4 = 2 4	12 Channel	Rature:
AV	m	0.7	- 4,	13	
//		0.7		14	
it 5	measurements	0.7		15 Dissolved	Oxygen:
1 21	Company of the second	The state of the s	1.4	16	Jo
Bants	apart	0.5		17 + 1	ppm MG/L
9		0.3	1	18	7.
of Street		0.3		19	
0 000		0.1	389	20	76
V. Jou				22	
sed IF 1	wetted width	0.1(6.2)		23 Channel F	en la sa e
ved # 1	9.4 m	0.3		24	eath C:
U3		0.3		25	s 5 Th
4	measurements	6.3		26 Dissalved	Oxa.
5	measurements 0.94 m	0.3		26 Dissolved	orgaer.
6	apart	6.3		· 7.2	am mal
7		(0.5)			167
. 8		0.5		n	- fat
9		6.0	75		7
10		0.2	T.		

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the bes datasheet is true and accurate.	st of my knowledge, that all informa	ntion reported on this UAA
Signed: MoSUH		
Organization: BWE COEP.	Position: ENV. SC	-(-

Data Sheet C - Cross-Sectional Depth Measurements (for estimation of median depth)

D	Distance from	Depth	Rank	Assigned Rank	Sorted depth
sect 10	Stream edge				
	Wetled width	0.1 (6.2)		1 Channeltea	ture:
7 2	- Illi m	03	and the second second	2	
3		0.13		3	
4	measurements	0.3		4 Dissalved O	Rugen
5	n	0.5		5	73
6	apant	04		6	000
7		(0.4)		70.0 7.1	pon mark
89		0,4		8	110
9		0.3		9	
0 10		0.3		10	
				11	1
d # 1	wetted width	0.1 (0.1)		12 Channel	France !
d 1 2	113 m	0.3		13	- Carares
E3		0.4		14	
4	measurements	0.4			Ny new :
5	m	0.7	2.4	16	Oxygen:
6	anart	0.10		17	nom
7		10.6)		18D0=7.1	mal
9		O.te		19	The state of the s
9		0.9		20	
10		0.9		21	1
				22	
ed #1	wetted width	0.1(0.1)		23 Channel +	Tealere!
2	10.0 m	Ost '	252	24	
F3		0.5		25	a :
1 4	measurements	0.6		26 Dissolved	OKNOEN
56	m	0.+			77
6	apart-	03			0.012
1		(0,6)		00= 7.1.	- 12 ma-11
8		0.7		n	01
9	2,000,000	0.4		- 84	
10		011			

to the middle rank is the median depth.

If there is an even number of entries, the median depth-corresponds to the arithmetic average of the two depth values surrounding the middle rank.

i, the undersigned, nereby affirm to the best of my know	wledge, that	all information reported on this IJA A
datasheet is true and accurate.		
Signed: No SH	_Date:	5/18/07
Organization: RWP CORP.	Position:	ENJ. SCI.

sect A 1	welled width	0.1 (0.1)	1 Channelt	eature:
	10.9 m	0.4	2	
3		000	3	
4	measurements	0.6	4 Dissalved	Oxugen.
5	n	0.7	5	
6	apant	(0.8)	6DO-Til	mg/L
7	,	0.8	7	127
8		0.6	8	782 800
		0.4	9	
10		0.0	10	
			11	
d # 1-	welled width	01((011)	12 Channe	/ Feature:
2	9.7 m	0.2	13	
+ 3		0.5	14	
4	measurements	0.4	15 Dissolu	red Oxygen:
5	m	035	16	Ju
6	apart	(0.6)	17 00-7	I pom mg/L
7		0,4	18	12
9		6.4	19	No.
9		0.2	20	
10	*	011	21	
, <u> </u>		0.1.6.1	22	
ed 1-	wetted width		23 Channe	I Feature:
	9.7m	0.5	24	
5		03	25	W.
-	measurements	0.2	26 Dissolve	d Oxygen
5	m	0.5		
6	apart	0.6	+1	my/
8		0.5		- May
8		019	n	
, –		011		
10			4	

Sik #_

Assigned Rank

Sorted depth

Rank

1305

Depth

Distance from

Stream edge

	Distance from	Depth	Sife #Rank	Assigned Rank	Sorted depth
1 100	Stream edge			1	Sorted deput
rct 18	welled width	01 (0,1)		1 Channel Fea	him .
-2	9.5 m	0.3	ALUE DE LE CONTROL DE LA CONTR	2	MIE.
53		0.3		3	
4	measurements	0.3		4 Dissolved O	Bugge
56	n	0.4		5	J.J.
6	apant	0.5		6	12.57/2
		(05)		700-7.2	ppa mg
789		0.5		8	70
9		0.5		9	
lo		0.2		10	1
				11	1
\$ 1	welled width	0.1(0.1)		12 Channel	France :
2	9.6 m	0.2 1		13	(alure)
1 3		0.2		14	
_ 4	measurements	0.3		15 Dissolven	Aviage .
5	m	0.4		16	Oxygen:
67	anart	20.4		17	nom
		(0.4)		18 00-7.1	m &
9		O.A		19	The state of the s
9		004		20	
10		0.2		21	
				22	
dC12	wetted width			23 Channel +	teatire:
5020				24	
3	,			25	8
	measurements			26 Dissolved	OKugen
5	m		- 1.000 N	. 1,	JJ
6	apart				0012
1					16%
8			3	n	
9	Land Control of the C				
10					

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my know datasheet is true and accurate.	wledge, th	at all	info	rmation reported on this UAA
Signed:	_Date:	5	18	07
Organization: BWR (OFP.	_ Position:		2/1/	sc (,

WBID#13 0 5		Field D	ata S	Sheet.	s for l	Recreati	onal Use	Strea	m Surveys	o_eni	
SICH			Da				Characted for each		on	्र [†] स क्	
Date & Time: 2	-18	-07				The second			e., road crossing):		
Personnel (Data C						100	Site Location Description (e.g., road crossing): City Hoghway 52 (North of bridge)				
Current Weather	Condition	S: SUMMY	425	<i>u</i> .		9-10-12-12-12-12-12-12-12-12-12-12-12-12-12-		tmster	dam WWT	F	
Weather Conditio	ns for Pas	t 10 days:	un	1	0	, n	Titalio.	AMO NO DIZ	ret MWTF		
							variour,		· MOU	1128767	
Drought Condition Site Locations:	is?: No d	rought X; Pha	ase I 🗀	; Phase	: II 🗆 ; I	Phase III 🗌	; Phase IV	□; Unkn	own 🗆		
LOCATION COORD	Myresign	NV=R-JAMERRA	NSVER!	SE MER	CATOR	PROMERNIO)	NAME TERS				
Site GPS Coord	inates: U	1M X:					V.				
HORIZONTAL COL	LECTION I	AETHOD (Indica	te the mi	ethod us	ed to det	ermine the loc	cational data.)	taran.	5.秦. 在三 光锋 。"是"。	以为·研究的2015年2月。	
Static Mode	Global	Positioning Sy	stem (C	SPS)					Interpolat	ion	
Dynamic Mode (Kine							Topographic Aerial Photo			*	
Precise Positioning S	ervice						Satellite Ima				
Signal Averaging	20028 SI						Interpolation	Other			
Real Time Differentia					De per san	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			E E		
		GPS Data Qua	ality					A SANCE TO			
FOM	±	LIVE CARRE	leters				Interpolation Data Quality				
EPE	±		or ±		Meters		Sourc	e Map Sca	ile: 1:24,000 1:100,0	000 Other	
PDOP					vielers			±_	Feet or ±	Meters	
Photos:											
Ups	stream Ph	otos				Oownstream	Photos			Other Dh. (
Photo ID#	Pho	oto Purpose		Photo						Other Photos	
The Andrews Services			$\rightarrow +$	T MOLO	ΙБπ	Photo Purpose Photo ID#			Photo ID#	Photo Purpose	
Uses Observed*	- (TT	· · · · · ·						*			
Uses Observed*	: (Uses	actually ob	serve	d at ti	me of	survey.)					
Swimming		☐ Skin div	ing		□ sc	UBA diving	g	☐ Tubing		☐ Water skiing	
☐ Wind surfing	-	☐ Kayaking	g		□ Во	ating [☐ Wading		☐ Rafting	
☐ Hunting		☐ Trapping	g		☐ Fis	shing		Non			
Describe: (Include	number o	of individuals	recreati	ng, pho	to-docu	mentation o	of evidence of	of recreat	ional uses, etc. Us	☐ Uther: se Data Sheet D- Recreationa	
Use Interview who	n conduc	ting interviews	s.)						ELANDONIA INTODONY POSONOMEN NEGO	The control of the co	
Surrounding Co.	ndition	e*: (Morle o	11 44 04					20			
Surrounding Counusual items of in	terest.)	o . (iviaik a	m mai	ı prom	ote or	impede re	ecreationa	l uses.	Attach photos of	of evidence or	
☐ City/county pa	rks	☐ Playgrou	unds	□м	DC con	servation la	nds	□ Urba	in areas	☐ Campgrounds	
☐ Boating access	es	☐ State par	rks		ational			□ Natu			
☐ No trespass sig	n	☐ Fence	100		teep slo			*		☐ Stairs/walkway	
Comments:					ccp sio	pes		None	of the above	Other:	
ndiantia 611	* 1							F			
ndications of Hu	ıman U	se*: (attac	h pho	otos)							
Roads	☐ Rope	swings	Foot p	paths/pr	rints	□ Dock/p	latform	☐ Li	vestock Watering	□ RV / ATV Tracks	
☐ Camping Sites			Fire pi	it/ring		□ NPDES	Discharge	□ Fi	shing Tackle	☐ Other:	
Comments:								-	/ - /4		

	×						10 CHANNE	
							Run = 100	Lo
* P	'age Two – Data ream Morpholog	Sheet B for WBID	#[305:5	ITE #	2	RIFFLE = POOL =	
	Upstream View's	Physical Dimensions	: Is the	re any water	present at	this view	? □ Yes □ No	
			If so	, is there an o	bvious cu	irrent?	□ Yes □ No	
	Select one of the	following channel fea	tures:					
	Channel Feature RIFFLE	Distance from access (n)	Width (m)	Lengt	th (m)	Median Depth (m)	Max. Depth (m)
	RUN							
	POOL							
	TOOL							
		v's Physical Dimensi	If	there any was			ew? □ Yes □ No	
	Channel Feature	following channel fea						
	RIFFLE	Distance from access (n)	Width (m)	Lengt	th (m)	Median Depth (m)	Max. Depth (m)
	RUN							
	POOL							
Su	bstrate*: (These	values should add up to	100%					
	% Cobble	% Gravel	100%.)	% Sand		0/ C:14	0/ 1/ 1/01	
		70 314101		70 Sailu	2	70 SIII	ioo % Mud/Clay	% Bedroc
Ac	uatic Vegetation	1*: (Note amount of ve			at the asso	essment site	e)	mudsi
W	ater Characteris	tics*: (Mark all that ap	ply.)				120	
	Odor:	☐ Sewage ☐ N	ſusky	☐ Chem	ical	None	☐ Other:	
	Color:	□ Clear □ C	reen	☐ Gray	æ	☐ Milky		un turbid
	Bottom Deposit:	□ Sludge □ S	olids	☐ Fine s	ediments	None	☐ Other:	The True Orton
	Surface Deposit:	□ Oil □ S	cum	☐ Foam		None	☐ Other:	
		attach any additiona						
dec	ision on the recreation	t to be used solely for re unding of water condition on use analysis but may	ns. Cons	equently, this conditions that	information need furth	n is not inte er analysis	ended to directly influe or that effect another u	nce a se.
Ple	ase verify that yo	u have completed all	section	s, checked al	l applica	ble boxes	and that everything	is complete.
	veyor's Signature:	$0 \rightarrow M$					= 5/18/07	■ 0×1 Bidd
Эr,	ganization:	BUR GRR.					ov. scl.	

Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1 Wetled width	0.1(0)		1 Channelto	
2 8.5 m	0.2		1 Channel Fee	mure:
2 0.9 m	0.5		3	
1 measurements				0
measurements 0.85 n	0.0		4 Dissolved O	<u>xyger</u>
apant	(0.6)		6 DO-7, H	
7	0.6		7	mg mg
9	-4/		8	16
9	.3		9	
10	. 2		10	
			11	
1 wetted width	1 (0.1)			Feature:
2 90 m	15		13	rearuse:
3	.7		14	
t measurements			15 Dissolve	100
5 m	000	B	16	Oxygen:
apart	(8)		17 DO-TA	
	V 9		18	2 pm mg
3	07		19	- la
7	. 6	F	20	
0	. 2		21	
			22	
1 Wetted width	0 (0 ()	\$	23 Channel	Feature:
	05		24	
3	"5		25	*
1 measurements	2		26 Dissolved	Oxygen mg/1
6 apart	(0)		. DO=7	,500 mg/1
	• 0			an D
7	. (0			16%
9	. 0		n	
10	6 0			
٧	00			

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my kind datasheet is true and accurate.	nowledge, that all information reported on this UAA
Signed:	
Organization: BWE CORR. February 5, 2007	Position:ENV. SC . Page 25

	Distance from	Depth	Rank	Assigned Rank	Sorted depth
sect D,	Stream edge		17/17		Soriea acpair
sect v 1	welled width	(60)		1 Channel Fea	tura.
2	9,4 m	. 7		2	
3		0 %		3	
4	measurements	94		4 Dissolved O	XUDER
5	n	04		5	JJ Co
6	apant	(05)		6 DO 7,5	ma ma
7		• 3		7	mg mg
89		. 3		8	7.8
		. 2		9	
10				10	
				11	
dE1	welled width	. ((0,3)		12 Channel	Arohue.
2	O le m	.3		13	41-170
3	V	03		14	
4	measurements	. 4		15 Dissolven	Drinen:
5	m	05		16	Oxygen:
67	anant	(65)		17 00-+14	por mg-1
		10		18	12
9		. 5		19	
9		. 3		20	
10		. 3		21	
22				22	
ed F1	weffed width	1 (0.3)		23 Channel	teatere:
12	110 m	.3		24	
3		. 2		25	8
	measurements	- H		26 Dissolved	Okugen
56	· h	(05)		1. DO-7	50 may/L
	apart	0 5			nan ()
7		9 4			-167
8		. 4	200	n	
9		. 3			
10		0			

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of n datasheet is true and accurate.	y knowledge, th	at all information reported on this UAA
Signed:	Date:	5/8/07
Organization: RI IF COPP	D	

	Distance from	Depth	Rank	Assigned Rank	Sorted depth
11	Stream edge	9994		8	Borred depair
ect 61	welled width	.1 (0.3)		1 Channeltea	tura.
2	0.0 m	.3		2	
3	00. 20	, 4		3	
4	measurements	. (0		4 Dissalved O	Rupen
5	1	(8)		5 00 - =	15 mg/
6	apant	. 8		6	// /
7		. 7		7	pon
8		05		8	78
9		. 3		9	
10		. 1		10	
				111	
d H 1	wetted width	.1(0,3)		12 Channel	Frating "
2	9.8 m	. 3		13	1 101110
3		0 4		14	
4	measurements	.5	W W	15 Dissolven	Oxugen:
5	- 98 m	(o (d)		16 DO = 7	How may
67	agart	7.		17	
		6		18	ppm
9		b H		19	120
9		. 3		20	
10				21	
-				22	
ed II	wetted width	. (1)		23 Channel +	Teatere!
2	9.0 m	• 3		24	
3		• 3		25	15
4	measurements	* 4		26 Dissolved	Okygen
56	m	.0			00
6	apart-	.8			0012
/	22	(-"9)		. DO=7.3	ma
8		• 7		n	
9		0 4	8.2		
li	1	0 1	dh.		

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

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Signed:	Date:	5/18/07
Organization: BUT CORP.	_ Position:	ENV. SCI.
February 5, 2007		Page 25

	Distance from	Depth	Rank	Assigned Rank	Sorted depth
ject 1,	Stream edge	1 (01)		. 0/	
1	welled width	.) (0.1)		1 Channeltean	ure:
2	8.5 m			2	
3		• 3	1	3	
	measurements	, 5		4 Dissolved Ox	ugen
5				5	
6	apant	04		6	ppn mxl
7		(.5)		700-7.5	myl
89		. 5		8	01
		o H		9	
10		6		10	Reserve to the second of the
				11	
dK1	wetted width	(6.0)		12 Channel F	Poher !
2	Cotm	12		13	201217-6
3		. 2		14	
4	measurements	<i>a</i>			Dress and i
5	0.67m	, 3		16	Oxygen:
6	anant	(.3)		1700 - 7.6	
67		.3		18	ma ma
9		.4		19	100
9		.4		20	
10	*	-3		21	
				22	
ed 1	wetted width			23 Channel Fe	2-6-01
eq 1				24 <i>Channel Fe</i>	anire:
				25	
3	measurements			26 Dissalved	0-
				26 Dissolved	Okygen
56	0000			•	
7	4000			* See and the second	Poll
8				•	Lo
9				n	
lo					

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

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datasheet is true and accurate. Signed:	Date: 5/18/07
Organization: BWR COPP.	Position: ENV. Scl.

Page 25

WBID#	1305				
Site#	3				

Field Data Sheets for Recreational Use Stream Surveys Data Sheet B - Site Characterization (must be completed for each site)

Date of Time.	2:00	MM 911	8/03	✓ Site L	ocation Descrip	otion (e.º	, road crossing):		
Personnel (Data	-		a tak						
		Gunny	750	Facilit	ty Name: Av	nstero	am wwtf,		
Weather Condit					Permit Number: MD 0125091, MO 0128747				
			7 100 00						
Drought Conditions Locations	ions?: No dr	ought (2); Phase I	⊥; Phase II	☐; Phase III	□; Phase IV □]; Unkno	wn 🗆		
		WYERSAL TRANSVE	RESE MERCA	OR PROJECTI	ON IN METERS				
Site GPS Coor	rdinates: U	TM X: 38.Z	700	Jijy and a state of the state o	Y: 94.	EI NI			
HORIZONTAL CO	OLLECTION N	IETHOD (Indicate the	method pend	n determine the	i. (4,	7600) = "*******		
	Global	Positioning System	(GPS)	o determine the	locational data.)	under Wegerich	Interpolation		
Static Mode					Topographic	Map or DF		OII .	
Dynamic Mode (Kinematic)					Aerial Photo				
Precise Positioning Service					Satellite Ima	gery			
Signal Averaging					Interpolation	Other			
Real Time Differential Processing						100	N M PAL TO M	7,00	
HORIZONTAL AG	CURACYESI	IVATE STATE OF THE	是型網報			建物设气型		Teach Living	
	1	GPS Data Quality			The second of the second	CONTROL CONTROL BOOK CO.	Interpolation Data		
FOM	±	Meters					, morpolation batte	dounty	
			Al-		Source	e Map Scal	e: 1:24,000 1:100,0	00 Other	
EPE	±	Feet or ±_	Me	ters		+	Feet or ±_	Matam	
PDOP								ivieters	
otos:									
Ţ	Jpstream Pho	otos		Downstrea	ownstream Photos		Other Photos		
Photo ID#	Pho	oto Purpose	Photo ID	#	Photo Purpose	:	Photo ID#	Photo Purpose	
	L								
s Observe	d*: (Uses a	actually observ	ed at tim	e of survey	.)				
☐ Swimming		☐ Skin diving		☐ SCUBA diving		☐ Tubing		☐ Water skiing	
☐ Wind surfing	g	☐ Kayaking	☐ Boating		ing			Rafting	
☐ Hunting		☐ Trapping		☐ Fishing		None of the above			
☐ Hunting ☐ Trapping					mentation of evidence of recreational			Other	
	auc number (n munividuals lette	ating, photo-	-documentatio	n of evidence of	of recreati	onal uses etc. He	Other:	
Describe: (Inclu	when conduct	ting interviews.)	ating, photo-	-documentatio	n of evidence of	of recreati	onal uses, etc. Us	Other: See Data Sheet D- Recreation	
Describe: (Inclu	when conduct	ting interviews.)	ating, photo-	-documentatio	n of evidence o	of recreati	onal uses, etc. Us	☐ Other: se Data Sheet D- Recreatio	
Describe: (Inclu Use Interview v	viien conduc	ing interviews.)			n of evidence o	of recreati	onal uses, etc. Us	se Data Sheet D- Recreatio	
Describe: (Included Interview of Variation Counding Cound	ondition	s*: (Mark all th			n of evidence o	of recreati	onal uses, etc. Us	se Data Sheet D- Recreatio	
Describe: (Include Use Interview variation) rounding Counties of	condition interest.)	s*: (Mark all th	at promot	e or impede	n of evidence of	of recreation	onal uses, etc. Us Attach photos o	of evidence or	
Describe: (Include Use Interview volume of Sual items of	condition interest.)	s*: (Mark all th	at promot	e or impede	n of evidence of	of recreation of recreation of recreation of recreation of recreation of the recreation of recreatio	onal uses, etc. Us Attach photos on areas	of evidence or Campgrounds	
Describe: (Include Interview of Counding Counding Counding County	condition interest.) parks	s*: (Mark all th	□ MD0	c conservation	n of evidence of	l uses. A	onal uses, etc. Us Attach photos of areas re trails	of evidence or Campgrounds Stairs/walkway	
Describe: (Inclu Use Interview v rounding C sual items of City/county Boating acc	condition interest.) parks	s*: (Mark all the Playgrounds	□ MD0	e or impede	n of evidence of	l uses. A	onal uses, etc. Us Attach photos on areas	of evidence or Campgrounds	
Describe: (Incluate Interview volume of Counding Counding County	condition interest.) parks	s*: (Mark all the Playgrounds	□ MD0	c conservation	n of evidence of	l uses. A	onal uses, etc. Us Attach photos of areas re trails	of evidence or Campgrounds Stairs/walkway	
Describe: (Include Interview of Counding Counding County Description Described Description Description Description Description Description Description Description Described Description Description Description Description Described Described Description Described Described Described Description Described Described Described Described Described Described Described Described Description Described Description Described Description Descrip	condition interest.) parks esses	s*: (Mark all the Playgrounds State parks Fence	□ MD0 □ Nati	c conservation	n of evidence of	l uses. A	onal uses, etc. Us Attach photos of n areas re trails	of evidence or Campgrounds Stairs/walkway	
Describe: (Inche Use Interview value of City/county Describe: Describe: Describe: Describe of City/county Describe: Describe: Describe: Describe of City/county Describe: Describe: Describe: Describe: Describe of City/county Describe: Describe of City/county Describe of	condition interest.) parks esses	s*: (Mark all the Playgrounds State parks Fence	□ MD0 □ Nati □ Stee	c conservation conal forests	e recreationa	Urba	Attach photos on areas re trails	Data Sheet D- Recreation of evidence or Campgrounds Stairs/walkway Other:	
Describe: (Inche Use Interview verounding Consul items of City/county Boating accomments:	condition interest.) parks sesses sign Human U	s*: (Mark all the Playgrounds State parks Fence Jse*: (attach poswings	□ MD0 □ Nati	C conservation ional forests p slopes	n of evidence of	Urba	onal uses, etc. Us Attach photos of n areas re trails	of evidence or Campgrounds Stairs/walkway	

×		16	v.	10 CHAN	NEL FEATUR
				Run = 10 RIFFLE = C	000
* Page Two - Data	a Sheet B for WBID #_	1305 . (1 2	RIFELS = C	
Stream Morpholo	gy:	• >1	12 # 2	Pool = ()
Upstream View's	s Physical Dimensions: I	s there any water r	present at this view	? □ Yes □ No	ea.
		If so, is there an o			
Select one of the	following channel featur	es:	ovious current?	☐ Yes ☐ No	
Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE	3.9			opin (m)	wax. Depth (III)
RUN					
POOL					
				(4)	
	w's Physical Dimensions	If so, is there an	obvious current?	ew? □ Yes □ No	1.00
RIFFLE	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RUN					
POOL				The second second	
Substrate*: (These	e values should add up to 100	0/0)			
% Cobbl		% Sand	% Silt	/ Mud/Clay	% Bedro
genation	NOVE O		at the assessment sit	e)	
Water Characteri	stics*: (Mark all that apply	5			
Odor:	☐ Sewage ☐ Musi		cal None	☐ Other:	
Color:	□ Clear □ Gree	5.0V	☐ Milky		raula le al-
Bottom Deposit:	☐ Sludge ☐ Solid		1	□ Other:	rown turb
Surface Deposit:	□ Oil □ Scun		None	☐ Other:	
C- N			- 1	Li Other.	
Comments: Please	attach any additional co	omments () to thi	s form.		
combi cucust ve minel st	of to be used solely for remove anding of water conditions. on use analysis but may poin	Onseguently this is	ntormotion is madina	1 1 1 1 7	
Please verify that yo	ou have completed all sec	tions, checked all	applicable boxes	and that everything	is complete.
Surveyor's Signature	10 > 101			, ,	
Organization:	NE CORP.	T	Position:	: 5/18/07 W. scl.	

Distance from	Depth	Rank	Assigned Rank	Sorted depth
Stream edge	# · 100,i	\	- 1	
Wethed wid	th . [0,1	1	1 Channeltea	rure:
Wetled wid	m o 2		2	
1	. 5		3	
Measureme	ents (3)		4 Dissolved C	xugen
5 0.64/	2 3		5	VV
10 apant	- 3		6 +.5	mg mg
7	-6.		7	My mg
8			8	
			9	
10			10	
			11	
1 welled wid 2 5.8 m	th . (0.1)	12 Channel	Feature:
	6.		13	
3	-5.	SH .	14	
4 measurem	nents 3		15 Dissolved	Oxygen:
			16	JU
6 apart	- 3		17	- pom
Commence of the Commence of th	- 2		18	17
9			19	
9	- 02		20	
10			21	
			22	
1 Weffed wi	dth 01 (0.1)		23 Channel	teatire:
	n of		24	
4 measureme	. 2		25	
	ents 95		26 Dissolved	Okygen
5	(09)			V
6 apart	- 0.5		1. 7.6	and ma
7	0 17			- 100
9	0 4		n	
	0 5			
10	0	(a)		

the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my	lead to the second
datasheet is true and accurate.	knowledge, that all information reported on this UAA
In all accurate.	w w do

Signed:	Date:	5/18/07	
Organization: BWR CORP.	Position:	ENV. SCI.	7,200
February 5, 2007	1 00111011.		

Data Sheet C - Cross-Sectional Depth Measurements (for estimation of median depth)

	Distance from	Depth	Rank	Assigned Rank	Sorted depth
10	Stream edge				Corred deput
nsect 6	VIVE OF DUIVING	. (.)		1 Channel Fea	tura.
2	(000 m	. 3		2	1016
2		6H		3	
4	- PULLATER TIES	(·H)		4 Dissalved O	VII DOL
5	-00 m	H		5	July
6	apant	1		6 7.5	may ma
7	7	. 3		7	per mg
8	7	. 2		8	/6
				9	
1	5	< 1		10	
				11	
nsed H	wetted width	0 (()		12 Channel	Fahre !
2	- VIO M	.2		13	and the second
3	3	03		14	
9		(03)		15 Dissolved	Oxunen .
5	m	00		16	Oxygen:
6	apart	6 2		17 7.6	por ma
		-2		18	12
5				19	
9		0		20	
10	2	201		21	
				22	
med I	wetted width	0 (0)		23 Channel F	eakre:
2	, III m	00		24	
3		- 3		25	*
2	measurements	0 4		26 Dissolved	Okuaen
į	-m	(65)			
<u>e</u>	apart-	05		1. to 0	may/
5	7	05		•	167
- 6	7	0 5		n	*
1	,				
e	4	6 0			November 1

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.

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I, the undersigned, hereby affirm to the best of my datasheet is true and accurate.	knowledge, tl	hat all informatio	on reported on t	his UAA
Signed:	Date:	5/18/07	æ	

Position: ENV. SCI.

	Distance from	Depth	Rank	Assigned Rank	Sorted depth
1	Stream edge				•
dJ_1	Welled width	6 (0)		1 Channelted	rkire:
2	7.8 m	. 2	(A)	2	
3		6.		3	
4	measurements	. 2		4 Dissolved O	Rugen.
56	n	(3)	a landaring and the same and the same	5	73
6	apant	+3		6 73	pan ma
7		.3	5.90	7	137
8	40	. 3		8	10
9		. 3		9	
10		02		10	
		8		11	
KI	wetted width	01 (0.5))	The same of the sa	Feature:
2	welled width			13	raine.
3		6.2		14	
4	measurement	4 . 2		15 Dissolve	1 124
5	m	(2)		16	1 Oxygen:
6	agart	0.3		17 7.5	
7		. 2		18	- pon na
9		1 2		19	- 12
9				20	
10		<.1		21	
				22	
d 1	wetted width				Feature:
2	m			24	realities.
3				25	
9	measurements			26 Dissalven	Oxygen
5	m			. 2133010681	Jugger
6	CA 6 2 61 8 1				0002
7					-167
8	7			n	
9					
10					
If th	ere is an odd num	har of antring find	!	n+1)/2]. The correspond	

depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed:	Date:5 18/07
Organization: BWR CORP.	Position: ENV. SCI.
February 5, 2007	Page 25

Mulberry a.

WBID#	1305
Site#	" Cuf

Field Data Sheets for Recreational Use Stream Surveys Data Sheet B - Site Characterization

ij			(IIIus	r ne com	pleted for each	SITE		
	Date & Time: 5/25/07 0910				Site Location Description (e.g., road crossing):			
	Personnel (Data Collec	tors): M6/5	5					n Gy Rd 2002
	Current Weather Cond	itions: Cloudy C		F	Facility Name:		Amsterdo	UM VANTE.
	Weather Conditions for	Devro / P	Device I VIVIII					
	Weather Conditions for Past 10 days: Suming horse Device! Drought Conditions?: No drought ☑; Phase I ☐; Phase II ☐; P					/	10012509	MO0128 747
Si	te Lucaliuns.							
	Site GPS Coordinate	STED TO SELECT SERVICES	ark a Marke	LIOR PROJ	Eers (c) Mill Marzes			
	one of a coordinate	S. UTM X: 20) 774	102 . 1	37.	211	4.4 1000 /	1 1 1
j	HORIZONTAL COLLECT	ON METHOD (Indicate the	methoduser	1 to determin	othologia (1	175	40+6N	/ (at bridge)
1	GI	obal Positioning System	(GPS)	- W LICHTHINI	e tre locational data;	edir Geli	2046. 和 : "左綱(1) (1862.) - 4	III FERMINAL PROPERTY OF THE
	Static Mode				Topographic	Map or DE	Interpolati	on
	Dynamic Mode (Kinematic) Precise Positioning Service				Aerial Photo			
	1397				Satellite Ima			
	Signal Averaging			150.00	Interpolation	Other		
	Real Time Differential Proc	essing						
	Homeonera	estuvate (Section 5						
		GPS Data Quality	×		ear		Interpolation Data	Quality
	FOM	±Meters					c.polation Date	Quality
	EPE	±Feet or ±		2574 250 (25)	Source	e Map Scal	e: 1:24,000 1:100,0	00 Other
	PDOP	reel of I	M	eters			Feet or ±_	
Ph	otos:						reet or ±_	iweters
	Upstream	n Photos		Down	stream Photos	102 302		Other Photos
	Photo ID#	Photo Purpose	Photo II	D#	Photo Purpose			Photo Purpose
	51		.5	0				1 noto i ui pose
Us	es Observed*: (Us	ses actually obser	ved at tim	ne of sur	vev.)	-		
	☐ Swimming	☐ Skin diving		□ SCUBA		□ T.1:		
	☐ Wind surfing	☐ Kayaking						☐ Water skiing
	☐ Hunting			☐ Boating		Wading		Rafting
ŀ	Describe: (Include num	☐ Trapping	ating photo	Fishing		None	of the above	Other: e Data Sheet D- Recreationa
	Use Interview when cor	iducting interviews.)	aurig, priote	o-documen	tation of evidence of	of recreati	onal uses, etc. Us	e Data Sheet D- Recreationa
Sui	rrounding Condit	ions*: (Mark all th	at promo	te or ime	20do 20	1		
ınu	sual items of interes	t.)	iai promo	te or mit	bede recreationa	I uses. A	attach photos o	f evidence or
		Trial Control		Cooper			NO. (1990-2004-2004-2014	
	☐ City/county parks	☐ Playgrounds		☐ MDC conservation lands		☐ Urban areas		
	☐ City/county parks ☐ Boating accesses	7,5,5,5,1,4,5			Service and the service and th	Discourse	SO CHEST CON	☐ Campgrounds
	☐ Boating accesses	☐ State parks	□ Nat	tional fores	Service and the service and th	☐ Natur	e trails	☐ Campgrounds ☐ Stairs/walkway
	☐ Boating accesses ☐ No trespass sign		□ Nat		Service and the service and th	☐ Natur	SO CHEST CON	
	☐ Boating accesses	☐ State parks	□ Nat	tional fores	Service and the service and th	☐ Natur	e trails	☐ Stairs/walkway
	☐ Boating accesses ☐ No trespass sign Comments:	☐ State parks ☐ Fence	☐ Nat	tional fores	Service and the service and th	☐ Natur	e trails	☐ Stairs/walkway
nd	☐ Boating accesses ☐ No trespass sign Comments: ications of Huma	☐ State parks ☐ Fence n Use*: (attach p	□ Nat □ Ste	tional fores	sts	□ Natur	e trails of the above	☐ Stairs/walkway ☐ Other:
nd	☐ Boating accesses ☐ No trespass sign Comments: ications of Huma	☐ State parks ☐ Fence n Use*: (attach pope swings ☐ Fo	☐ Nat	ep slopes	Service and the service and th	□ Natur □ None □ Liv	e trails	☐ Stairs/walkway

					()	o chapped	evil soice 2
age Two – Data eam Morpholog	Sheet B for V y:	WBID #_	1305:51	Tε # ⁽	+	RUN - 1009 RIFFLE -	7
Upstream View's	Physical Dime	ensions: Is	there any water	present at		1 0 0 1	
			If so, is there an o			□ Yes □ No	
Select one of the f	ollowing chan	nel feature	es:			1 res 21 140	
Channel Feature RIFFLE	Distance from	access (m)	Width (m)	Lengt	h (m)	Median Depth (m)	Max. Depth (m)
RUN	-		2002 - 1200 - 1				
POOL							
	1						
Downstream View			If so, is there ar			ew?	
Select one of the f Channel Feature	Distance from	nel leatur	Width (m)	*	1		T
RIFFLE	a local to the	decess (m)	width (III)	Lengt	n (m)	Median Depth (m)	Max. Depth (m)
RUN							
POOL							
			A THE SHARE THE PARTY OF THE PA				
bstrate*: (These	values should ad	d up to 100	%.)				
bstrate*: (These % Cobble % Cobble uatic Vegetation	1*: (Note amour	Gravel of vegetat	% Sand	at the asse	% Silt	95 % Mud/Clay	% Bedrock
% Cobble	.05 % (Note amour	Gravel of vegetat	% Sand	at the asse			% Bedrock
% Cobble	.05 % (Note amour	Gravel of vegetat	% Sand	at the asse			% Bedrock
% Cobble	.05 % (Note amour	Gravel of vegetat	% Sand				% Bedrock
% Cobble	1*: (Note amount tics*: (Mark al	of of vegetat	% Sand stion or algal growth	ical	essment site	c) □ Other:	
% Cobble [uatic Vegetation ater Characteris Odor:	tics*: (Mark al	int of vegetate	% Sand stion or algal growth c) Cy	ical	None ☐ Milky	□ Other:	
% Cobble [uatic Vegetation ater Characteris Odor: Color:	tics*: (Mark al	I that apply. Green	% Sand tion or algal growth Cy	ical ediments	essment site	c) □ Other:	

Mulberry Cr.

Data Sheet C - Cross-Sectional Depth Measurements (for estimation of median depth)

	Distance from	Depth m	Sik#	Aggin 17	
Transect A.	Stream edge			Assigned Rank	Sorted depth
	8.6 m	8.01		1 Change	
of them 5	m die	0,2		1 Channel Fe	
nd 4	200	0.3	and the second	1 2	ruv
from 5	Meanirements 0,8 m	0.5		4 Disselval	2
5		0.5		4 Dissolved	xygen
. 7	apart	0.7	6.4 ppm	6 6.4	-
7°C 8		0.6	- Prince	7	pea
8		0.5		8	7
10		0.4		9	
20		0.3		10	
	well a si			11	
ansed B1	wetted width	0.1		The state of the s	
2	7.9	0.3		12 Channel	Feature:
3		0.4		13	run
4	measurements	07		14	
5		0.7	6.3	15 Dissolved	Oxugen:
67	quart	0.5	6.3 ppm	16	Oxygen:
9		0.3			ppm
		0.2		18	17.
9		0.1		19	
10		>0.1		20	
 				21	
ansed C	weffed width	0.1		22	0
2	10.0 m	0-4		23 Channel F	eatere:
3		0.6		24	run
	measurements	0.8		25	
5		0.8		26 Dissolved	Okyaen
6	apart	0.8	6-4 0000		oxygen
<u>/</u>	32	0.7	6-7 ppn	. 6.4	an.
8		0.4			12
9		0.3		n	
10_		0.1			100

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth t

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two

I, the undersigned, hereby affirm to the best of my	y knowledge, that all information reported on this UAA
datasheet is true and accurate.	Anowieuge, that all information reported on this UAA
Signed: ASIH	- I I

Signed:	D1.1-
Organization: BWR GRP.	Date: 5 18 07
February 5, 2007	Position: ENV. SCI.
	Page 25

- 10	Distance from Stream edge	Depth	- Sik# 9 Rank	Assigned Rank	Sorted depth
ransect D	wethed width	0.1			Sorted depth
2	10.6	0.1		1 Channel For	A.c.
5		0.3		2	nure:
4	Meak to the	The second secon		3	run
5	measurements			4 Dissolved	2
6		0.8	G. 2 ppr	5	xygen.
	apart	0.8	17	6 6-2	
mad 8		0.7		7	ppa
MNO 9		0.6		8	1/4
10		0.4		9	
20		0.1		10	
	wall to the			11	
vea E 1	wetted width	0.1		Contract of the last of the la	
-	The state of the s	0.4		12 Channel	Carrie:
3		0.6		13	
4	measurements	0.7		14	
5	- I. M	0.7	6.4 non	15 Dissolved	Oxugen:
9	apiant	0.8	6.4 ppm	16	Dxygen:
9		0.8			ppm
A. Commercial Commerci		0.6		18	7
		0.4		19	
10		0.1		20	
				21	
ved F1	Wetted width	0.2		22	
4	17.5 m	0.6		23 Channel Fe	akre:
2		0.8		24	
1 1	measurements	0.9		25	
5	1.5 m	0.8	6.2 yan	26 Dissolved	Okygen
6	apart	0.7	6. 2 ypm		J
7		0.6		. 6.2	Days.
8		0.5			167
9		0.3		n	600
10_		0.1			-

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth t

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two

I, the undersigned, hereby affirm to the bed datasheet is true and accurate.	st of my knowledge, that all information reported on this UA
datasheet is true and accurate. Signed:	Date: 5/10/57
Organization: BUR CORP	Position: ENV. SCI.
February 5, 2007	

T ROM	Distance from Stream edge Wether width	Depth	Sik#	Assigned Rank	Cod
Iransect 61	wethed width	011			pag
2	7.7 m	0.3		1 Channel Fe	-6
- Lim 3	H No. Trans	0.3		2	mare:
strictim 4 log/silt 5	Measurements	0.5		3	run
109/5 5	0.7 n	0.7		4 Disselved	2
109/5° 5	apart	0.8	6.6	4 Dissolved	Nygen.
bank 7		0.8		6 6.6	
8		0.6		7	pen
9		0.4		8	16
10		0.2	_	9	
		0		10	
ransed H 1	wethed width	0.2		11	
2_	8.5 m	0.6		12 Channel	+/
3		0.9		12 Channel	
4	measurements	0,9		14	run
5	0.8 m	0.8		15 Disselve	12
67	ajiart	0.9	6.7 ppm	16	exugen:
		0.8	07	17 6-7	Dxygen:
9	200	0.6		18	ppm
9		0.4		19	Lee
10		0-1		20	
		0-1		21	
vanved II	vetted width	0.1		22	
	9.0 m	0.4		23 Channel Fe	ak no i
3		0.3		24	altre:
9	measurements	0.6		25	
5	0.9 h	0.7		26 Dissalved	Or.
6	avart	0.7		·	Okygen
7		0.7	6.7 yym	. 6.7	
9		0.6	//		PORT
13	2200	0.4		n	4
10		0.4			
this is		The state of the s	niddle rank [(n+1)/2].		

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two

I, the undersigned, hereby affirm to the best of datasheet is true and accurate.	my knowledge, that all information reported on this UAA
Signed:	Date: 5/18/07
Organization: BUR CORF.	3 110 0 1
February 5, 2007	Position: EDJ, SEI.

Data Sheet C - Cross-Sectional Depth Measurements (for estimation of median depth)

+	Distance from Stream edge	Depth	- Sife #_ Rank	Assigned Rank	Sorted depth
Transect I	wethed width	0.1			1
2	9.5 m	6.4		1 Channel Fe	obico.
5		0.4		2	
· 4	Measurements	0.5		3	
Thom 5	09 0	0.6		4 Disselved o	muse.
tom 6	apart	0.6		5	Jek
(27) I to 12 (27)		0,5	6.7	mm 6 6,7	ppa
8		0.4	- 11	7	127
9		0.4		8	16
10		0.2	and the second s	9	
		0.2		10	
ranked K_1	wetled width	0.1		11	
Ln9 2	10.6 m	0.3	+	12 Channel	France :
3		0.4		13	THE .
604	measurements	0.4		14	
- 1,5	1.0 m	0.7	15	15 Dissolver	Oxygen:
96	ayart	0.6	6.7	16	Jugen.
1 7		0.5		T	nnm
9		0.4		18	ppm
9	- 12 di	0.2		19	100
10	44	0.1		20	
_				21	
vanved 1	wetted width			22	
manued 1 94,538562				23 Channel F	rakre:
3				24	
A 106	measurements			25	
3,23805 4 upstream 6	m			26 Dissolved	Okyaen
end 5	apart	THE STATE OF THE S			77
	970			1	an 1
8					15
1				n	
10_					

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth t the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my datasheet is true and accurate.	knowledge, that all information reported on this UA
Signed:	Date:

Signed:	Date: 5/18/07
Organization: BWR GRP.	Jirelo (
February 5, 2007	Position: ENV. Scl.
	Page 25

WBID#	1305
Site#	5

Field Data Sheets for Recreational Use Stream Surveys Data Sheet B - Site Characterization (must be completed for each site)

	Date & Time: 5/25/07 0945				Site Location Description (e.g., road crossing):							
	Personnel (Data				-5		1	below	bridge	(at Site 4) - County	00
	Current Weathe	r Conditions	s: clon	dy m	ital		Facility	Name:		Amsterd	am WATER	00
	Weather Condit	ions for Pas	t 10 days:	Sunny	+ cl.	ouds	Facility Name: Amsterdam wwtFi Ampret wwtF Permit Number: MD 0125091, MD 0128767				*	
	Drought Conditi	ons?: No d					hase III 🗆	· Phase IV [7. Unkno	Num []	0120 10 1	
Si	w Lucalinis											
	Site GPS Coor	dinates: II	TM X	194 5	SE MERI	AFOR P	Elegization	IN METERS	Light (ba)			
	HORIZONTAL CO	ALECTION N	ETHOD (I	dicate the n	nethod use	/ aid to idealai		Y: 38	, 238.	35		
		Global	Positionin	g System (GPS)	id to deter	muse me tor	ational data:)		<u> </u>	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	连气点
	Static Mode							Topographi	Map or DE	Interpolat	ion	
	Dynamic Mode (Ki Precise Positioning							Aerial Photo	ograph or D	OQQ		-
	oker -	Service						Satellite Ima	agery			
	Signal Averaging							Interpolation	Other			
	Real Time Differen	tial Processin	9					e d'e	1 647			
	STICALLY CONTACT AND	ARALT ESI	IMA IE	14 18 18 18								20.17.100.0
				Quality	N 1034	100 ·				Interpolation Da	a Quality	-
3	FOM	±		Meters				727	DEST S			
	EPE	±	Fe	et or ±_	N	Meters		Source	e Map Scal	le: 1:24,000 1:100,	000 Other	_
	PDOP		-5/10						±_	Feet or ±	Meters	
Ph	otos:											
	[]	pstream Pho	otos				92	Wast State				
	Photo ID#				-	100 000	ownstream	Photos			Other Photos	
		FIIC	oto Purpos	ie	Photo 1	Photo ID# Photo Purpose		e 	Photo ID# Photo I			
	52				5	3						
Us	es Observed	*: (Uses a	actually	observe	ed at tir	ne of s	urvev)					
	☐ Swimming		☐ Skir				JBA diving	g	☐ Tubi	ng	☐ Water skiing	
	☐ Wind surfing		☐ Kaya	king		□ Boa	ting		□ Wad		☐ Rafting	
	☐ Hunting		☐ Trap	ping		☐ Fish	ning		10/11			
	Describe: (Includ	de number o	f individu	als recreat	ting, phot	to-docum	nentation o	of evidence	of recreati	onal uses, etc. II	Other: se Data Sheet D- Recrea	-ti1
	Use Interview w	nen conduct	ing interv	iews.)						2003, 010.	se Data Sheet D- Recrea	utonai
S			W 10 13									
unu	rrounding Consulting C	nterest.)	s*: (Ma	rk all tha	at prome	ote or i	mpede re	ecreationa	l uses. A	Attach photos	of evidence or	
	☐ City/county]	parks	☐ Play	grounds	□м	DC cons	ervation la	nds	☐ Urba	n areas	☐ Campgrounds	
1	☐ Boating acce	sses	☐ State	parks	□ Na	ational fo	orests		☐ Nature trails		☐ Stairs/walkway	
1	☐ No trespass s	ign	Fend	e	□ St	eep slop	es			of the above	Other:	
	Comments:			D-300-1							Li Ottier.	
Ind	ications of F	luman U	se*: (a	tach nh	otos)							
	Roads	☐ Rope s			paths/pri	ints [☐ Dock/p	latform	П.	2025 1 NW 2		
	☐ Camping Site		2000	☐ Fire p				Discharge		estock Watering	□ RV / ATV Tracks	
	Comments:						- NUCES	Discharge	☐ ☐ Fis	shing Tackle	Other:	

				% CHANNEL	FEATURES
* Page Two – Data Stream Morpholog	Sheet B for WBID #_gy:	1305 : SIT	TE #5	Run - 100 RIFFLE - 0 -	010 10
opstream view s	Physical Dimensions: I			iew? Yes No	
Select one of the	following channel featur	If so, is there an ol	ovious current?	☐ Yes ☐ No	
Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE				irredian Deput (III)	iviax. Depth (in)
RUN					1
POOL					
Select one of the	w's Physical Dimensions	If so, is there an es:			174
Channel Feature RIFFLE	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RUN	200M	100 M			
POOL	0001	(O) M			
Substrate*: (These	values should add up to 100	%)			
() % Cobble	e 5 % Gravel	() % Sand	() 0/	Silt 95% Mud/Clay	% Bedrock
Water Characteric	NONE OBSER				
Odor:	stics*: (Mark all that apply				
Color:	☐ Sewage ☐ Musl		cal N	one	
	□ Clear □ Gree	n 🗆 Gray	П М	lilky Other:	urbid Brown
Bottom Deposit:	☐ Sludge ☐ Solid	ls \Box Fine se	diments N	one	
Surface Deposit:	□ Oil □ Scun	n 🗆 Foam	DN	one	
This information is no comprehensive understallectric on the recreation	attach any additional control to be used solely for removanding of water conditions. on use analysis but may point the control of the contro	val of a recreational Consequently, this into conditions that	use designation nformation is no need further ana	but rather is to provide a rot intended to directly influissis or that effect another	uence a r use.
Surveyor's Signature	u have completed all sec	enons, checked all			
Organization:	SWR CORP.		Position:	rvey: 5/25/0 ENU. SCI.	

Data Sheet C - Cross-Sectional Depth Measurements (for estimation of median depth)

	Distance from	Depth	Rank		
Transect A	Stream edge	-	TOTAL STATE OF THE	Assigned Rank	Sorted depth
99 <u>B</u> o		0.1		1 0/	
at 3	9.5 m	0.2		1 Channel Fe	dure:
at 1		0.3		40	run
aft ?	BRUIPIPENIS	0.5		3	
5	6.9 m	0.5		4 Dissolved	xygen
	apart	0.5	6.9 ppm		
1/0	P. BOARDA	0.5	fpm	6 6.9	pon
d/ 8		0.4.		8	7
myd 10		0.3		9	
mua 20		0.1		10	
marad O	14/0/1-1-111			11	
ansed B1	wetted width	60.1			+ /
3		0.3		12 Channel	
W 4	me alessa d	0.4		14	run
w 4	measurements	0.4			12.
6	ayart	0.4		16	Oxygen:
5	4	0.4	6.9. pm	17 6.9	
9		0.4	//	18	ppm
9		0.3		19	100
10		0.1		20	
				21	
anved 1	Wetted width	40.1		22	
	7.9 m	0.2		23 Channel F	ratire:
3		0.3		24	
1000	measurements	0.4	8	25	1
5	0.7 m	0.5	6.9 ppm	26 Dissolved	Okygen
6	apart	0.4	6.7 ppm	•	33
7 8		0.4.		6.9	pm
9		0.3		·	7
10		0.3		n	
"4_		0.1			

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth t the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of datasheet is true and accurate.	f my knowledge, that all information reported on this UAA
Signed:	Date: 5/25/07
Organization V. 18 a 20	Date: 0(5)(0)

Organization: BWR COPP. Position: ENV. SCI.

Stream edge	Берш	Sike #	Assigned Rank	Sorted depth
	< 0.1			
2 8 9 40	0.1		1 Channelte	dure.
4 mean no no de	0.2		4	run
4 measurements	0.3		3	7
5 08 n	0.3	1.0	4 Dissolved	Drugen
5 08 n 6 apart 7 8	0.3	6-9 ppm	5	Jyen
7	0.3	V1	6 6.9	The same of the sa
8			7	ppa
8 10	0.4		8	- (4
10	0.3		9	
	0.1		10	
1 wetted width	1 - 1		11	_
2 8.6 m	20.1			#/
3	0.1		12 <i>Channel</i>	
	0.2		14	ruu
measurements 0.8 m	0.3	15.5	15 Deschie	10
			16	exygen:
agart	0.4.	6.9 ppm	17 6.9	Oxygen:
3	0.3	Of the state of th	18	ppm
7	0.4		19	1/2
0	0.3		20	
	0.1		21	
1 10/0/10/1 1/1			22	
wetted width	40.1			
		N-20	23 Channel F	
measurement	0.3		25	run
	0.4		26 7 - / 4	
apart	0.5		20 Dissolved	Okygen
apart	0.5	7.0 ppm	7.0	00
	0.4	7.0 ppm		par
	0.4		n	Z
	0.2		П	
1	0.1			

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth t

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two

I, the undersigned, hereby affirm to the best	f of mary law.
datasheet is true and accurate.	t of my knowledge, that all information reported on this UAA
Signed:	Date: 5/75/07
Organization: BWR CORP	

Position: ENJ. SCI February 5, 2007

- 1.	Distance from Stream edge	Depth	- Sik # Rank		
ransect 61	Stream edge Wether width	011		Assigned Rank	Sorted depth
2	9.4	011		1 Ch 1=	1
3	7.4 m			1 Channel For	dure:
4		0.5		3	run
5	measurements			4 Dischal	
5	The state of the s	0.6		4 Dissolved C	xygen
7	apart	3.6	7.1 ppn	6 7/	40
8		0.6	PAR	7	pen
8		0.5		8	7
10		0.4		9	
20		0.1			
vea H	14/0/1-1-11			10	
ved [] /	wethed width	0.1		11	
3		8.6		12 Channel 7	capue:
4	4.0.1	0.8		13	run
5	measurement		7.1 ppm	14	
	1.0 m	0.8	Plan	15 Dissolved	Oxugen:
4	quart	0.8		15 Dissolved 16 17 7 18 19	JO .
9		0.6	7.8	18	ppm
9		0.6		19	Ten
10		0.3		20	
		0.1		21	
BOT I	10/01/01 1/1			22	
2	Wetted width	0.2			
3		1.1		23 Channel Fe	atre:
4	measurements	1-1		25	run
5	0.8 M	0.9			
6	apart		7.1 ppm	PISSOIVE A	
7	apart	0.8	. 07	7	
19		0.8		7-1	gar-
19		0.8		n	7
10		0.4		11	

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two

I, the undersigned, hereby affirm to the bes datasheet is true and accurate.	t of my knowledge, that all information reported on this UAA
Signed:	Date: 5 25 0.7
Organization: BWR GRP	
February 5, 2007	Position: ENV. SCI.

Data Sheet C - Cross-Sectional Depth Measurements (for estimation of median depth)

+ 1	Distance from Stream edge	Depth	Sik #_ 6	Assigned Rank	Sorted depth
Transect	1 Welled width	0.1			
	7.7 m	0.3		1 Channelt	copiro.
8	2	014		-	run
	Measurements			3	
Ĵ	0.7 n	0,4	72	4 Dissalved	Oxugen
(apart	0.4	7.2 ppm	4 Dissolved	40
-		0.4		6 7.2	
8		0.3		7	pon
	Charles and the Control of the Contr	0.2		8	
10		0.1		9	
10				10	
ransed K	wethed width	0.1			
2 3 3 4 4 5 Tave 4 5	8.4 m	0.3		13 hannel	Feature:
6 4	The state of the s	0.4		14	run
aut 5	measurements	0.3		15 Deschie	4.4
4/4	2 4 5	0.4	7. 3. ppm	16 Produce	Oxygen:
67	ajart	0.4	00	17 7-3	
9		0.4		18	ppm
9		0.3		19	Le
10		0.1		20	
		0.1		21	
anued 1	wetted width			22	
arved 1	n			23 Channel F	cohre.
3				24	-
9	measurements			25	
5	m			26 Dissolved	Okygen
6	apart	12.			J
8					DAR.
9				-	1/2
10				n	
-4_					

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth t

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two

I, the undersigned, hereby affirm to the best of my ladacasheet is true and accurate.	knowledge, that all information reported on this UAA
Signed:	Date: 5/75/07
Organization: BUR CORP	3/0/01
February 5, 2007	Position: ENV. 5C1.

WBID#_	1305
Site#	6

Field Data Sheets for Recreational Use Stream Surveys Data Sheet B - Site Characterization

				(must b	e cor	npleted t	for each site	∋)				
Date & Time: 6 75 07 1000					Site Location Description (e.g., road crossing):							
Personnel (Data Collectors): BARTLETT & CASEY				BRIDGE CROSSING BOR 4502								
Current Weather Conditions: SUNN ~ 75°					Facility Name: AMSTERDAM WWIT AMORET WWIFE							
Weather Condition						Permit N	MOE	\$12599 \$1287	1	#0.00 - 0.15.4Mb		
Drought Conditio	ns?: No drou	eht 🖾: Ph	ase I 🗆 :	Phase II	□: Pha	ase III 🗆:		é				
ite Locations:		2.50			Marc. Person							
EFFOR FEIDLEGEORI					(9) ,			And the law				
Site GPS Coord						on the substitution of the	Y: 094,	569	75	Notice (No. 60% in Society Press)		
HORIZONIFALESO									Interpolation	on		
Static Mode							Topographic N	lap or DR	3			
Dynamic Mode (Kin Precise Positioning					+		Aerial Photogr Satellite Image		QQ			
Signal Averaging			3/		+		Interpolation C	-com				
Real Time Different	tial Processing											
HORIZONIAL ACC		COLUMN TO SERVICE AND TOTAL CO							de la companya de la			
		SPS Data Qu	uality		orani.		数数数		Interpolation Dat	a Quality		
FOM	3 1982						Source	Map Scale	e: 1:24,000 1:100,0	000 Other		
EPE	±	Feet	or ±	Me	ters			±	Feet or ±	Mete	ers	
PDOP												
Photos:						y -						
Ţ	Jpstream Phot	os			De	ownstream Photos Other Photo			OS			
Photo ID#		o Purpose		Photo II	: SARSKGA	Photo Purpose Photo ID#			Pho	oto Purpose		
1305-13,4	1305-13,4 TRAN J-K 1305-1,2				,2	TRA	JB-A					
Uses Observe	d*: (Uses a	ctually o	bserve	d at tim	ne of	survey.))				1	
☐ Swimming	☐ Swimming ☐ Skin diving ☐ Sc			□ sc	UBA divi	ng	☐ Tub	ing	☐ Wat	ter skiing		
☐ Wind surfin	g	☐ Kayak	ing	1	□ Bo	oating		☐ Raf	ting			
☐ Hunting		☐ Trapp			☐ Fis				☐ Oth	0.7.7.7		
Describe: (Incl	ude number of	f individua	ls recrea	ting, phot	o-doci	ımentation	of evidence	of recreat	ional uses, etc. 1	Jse Data She	eet D- Recreationa	
Use Interview	when conduct	mg mervi	ews.)		138		18					
Surrounding (s*: (Mar	k all tha	at promo	ote or	impede	recreationa	al uses.	Attach photos	of eviden	ice or	
unusual items of	f interest.)	27-22				~				1		
☐ City/count	y parks	☐ Play	grounds	□м	DC cor	nservation	lands	☐ Urban areas		☐ Ca	mpgrounds	
☐ Boating ac	cesses	☐ State	parks	□ N	ational	forests		☐ Nat	ure trails	☐ Sta	☐ Stairs/walkway	
☐ No trespas	s sign	☐ Fenc	е	☐ St	teep sle	opes		Mon	ne of the above	☐ Ot	her:	
Comments:			20									
Indications of	f Human L	Jse*: (at	tach p	hotos)								
X Roads	☐ Rope	swings	☐ Foo	ot paths/pi	rints	□ Doc	k/platform	☐ Livestock Watering		ng 🗆 RV	/ ATV Tracks	
☐ Camping S	Sites		☐ Fire	e pit/ring		☐ NPI	DES Discharg	e 🗆	Fishing Tackle	☐ Oth	ier:	
Comments:	CR 45	07								- 1,		
	1 6	-										

5	8			CHANI	NEL FEATURE : 70 RIF	%
T	an an a	1	17 . 7	RUN	: 70 RIF	FLE: 20
* Pag	ge Two – Data S	Sheet B for WBID #_	1305 =	C RHET	cue	
Otice	an morphology			800	L: 10	
U	ostream View's H	Physical Dimensions:	s there any water	present at this vie	w? ☐ Yes ☐ No	
			If so, is there an	obvious current?	☐ Yes ☐ No	
		llowing channel featur				
-	Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
6	UFFLE					
	RUN					
1	OOL					
D	ownstream View	's Physical Dimension	s: Is there any w	ater present at this	view? □ Yes □ N	o
S	elect one of the f	ollowing channel featu		an obvious current	? □ Yes □ N	No
_ (Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
_	RIFFLE					
	RUN					
L	POOL					
Sub	strate*: (These	values should add up to 10	00%.)			
	75 % Cobble	e 15 % Gravel	5 % San	1 5 %S	ilt % Mud/Clay	% Bedrock
Agı	uatic Vegetation	n*: (Note amount of vege	tation or algal gro	arth at the assessment	cite	
		ERABLE ALGAL G				MACROPHYTE.
		NTH park ALONG BA				
WW 7					t to	
VV a	Odor:	stics*: (Mark all that app		emical N	one 🗆 Other:	
ŀ	C-1	1				
}	Color:	Clear G		ay \square M	ilky Other:	
	Bottom Deposit:	☐ Sludge ☐ Sc		ne sediments \square N	one	
	Surface Deposit:	□ Oil □ So	cum K Fo	oam 🗆 N	one	
Co	mments: Please	e attach any additiona	Comments () to	o this form		
57707		,		o mid ioini.		
*T	his information is n	ot to be used solely for rea	noval of a recreati	onal use designation	but rather is to provide a	more
dec	nprehensive unders cision on the recreat	tanding of water condition tion use analysis but may	ns. Consequently, point to conditions	this information is no that need further and	ot intended to directly in: alysis or that effect anoth	fluence a er use.
Ple	ease verify that y	ou have completed all	sections, checke	ed all applicable b	oxes and that everyth	ing is complete.
Su	rveyor's Signatur	e: And	·	Date of St	urvey: 6 25 0	7
Oı	rganization:	BWR COEP.		Position:	ENV.SCI.	

Data Sheet C - Cross-Sectional Depth Measurements (for estimation of median depth)

Distance from	Depth	1305 #6 Rank	Assigned Rank	Sorted depth
Stream edge	Вори	TCUIK	Assigned Rank	Sorted depth
WETTED WIDTH	20.1		1 CHANNEL	FEATURE:
Guis 6.2	0.1		2 RUN	
	0.7		3	
MEASUREMENTS	0.1		4 DISSOLUE	ED OXYGEN:
ark 8 0.62	0.		5	
ABART	0.1		6 5.09	ppM
	0.1		7	0.1
	0.(8	
	0.7		9	
	0.4		10	
METTED WIDTH	< 0, (11 12 CHANNE	-1 C-1 DE 1
9.0	0,1		12 CHANNE 13 RON	
1,0	6.1		14	
MEASUREMENTS	0.1		15 DISSOLU	ED OXYGEN!
5 0.90 M	0.1		16	ob - Kiggo.
APART	< 0. \		17 5.53	PpM
7	< 0.1		18	THE STATE OF THE S
8	<0.1		19	
9	0,1		20	
0	< 0.1		21	
, ^ -	1 = 2 1			VEL PEATURE:
WEITED WIDT			23 RUN	7
Z 7.0	0.1		24 25 DISSE	
4 MEASUREMENT	0.4		25 1/1596	DLUED OXYGEN:
5 0.70 m	5 0.1		5.8	(004
	0.1		1: 2.0	6 ppm
7 ARACT	0.7			
8	0.Z		n in	
9	0.1			
10	<0.1			

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

_

Position: ENV. SCL.

February 5, 2007

Organization: BWR CORP.

1305 #6

Distance from	Depth	Rank	Assi	gned Rank	Sorted depth
Stream edge					
LWETTED WIDTH	<0.1		1	CHANNEL	FEATURE:
2 6.5 3	0, \		2	RUN	
3	0.1		3		
4 MEASUREMENTS	0,1		4	DISSOLVED	OXYGEN:
5 0.65 M	0, Z	9	5		100
APART	0,2		6	6.01	CON
7	0,2		7		Ppm
7	0,2		8		
7	0,2		9		
0	ZD.		10		
			11	CHANNEL	PEATURE:
HOIN DETTEN	<0.1		12	TELESAN	RIFFLE
2 5.0	0.1		13	NO ES	
	6.1		14	DISSOLVED	exygen:
3 4 MEASURE MENTS	0.1		15	0(1)	
5 0.50 n	0.1		16	6.24	20.40
6 APART	Dil		17		ppm
7	0.		18		
8	0. 1		19		
9	0.1	4	20		
18	<0.1		21		
			22	CHANNE	FEATURE:
1 WETTED WIDTH	<0,1		23	RUN	
7 9.8	0.1		24		
3	0.3		25		
4 MEASUREMENT			26		ed oxiden;
5 0.98 n	0.5				
6 HART	0.5			6.32	ppm
7	0.5				
9	0.5		n	West 1	
1	0.4				
10	<0,1				

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the unde	ersigned, hereby	affirm to the best of my knowledge, t	hat all information reported on this UAA
datasheet	is true and accu	rate.	
Signed:	ABA	Date:	6(25/07

Position: ENV.501.

February 5, 2007

Organization: BWR CORP.

Data Sheet C - Cross-Sectional Depth Measurements (for estimation of median depth)

The same		1305 #6		
Distance from Stream edge	Depth	Rank	Assigned Rank	
METTEDWIDTH	60.1		1 CHANNEL	FEANEE!
7.5	0.1		2 RIF	FLE
3	0.1		3	
4 MERUPEMENTS	0.Z		4 DISSOLVE	D OXYGEN:
5 0.75 m	0.1		5	
G APART	0,2		6 6.73	sem
7	0,2		7	1'
8	0, Z		8	
10	0.1		9	
	40.1		10	
	- 1		11	
1 MAJOU MOUNT	0.1		12 CHANNEL	FEATURE:
2 5.5	0.7		13 RUN	
	0.4		14	
4 MEASUREMENTS	0.5		15 DISSOLU 16	ED OXTGEN.
			17 6.46	0
6 APART	0.3		18	gem
8	0· Z	AND THE RESERVE TO TH	19	
9	0.2		20	
10	0.1		21	
			22	
1 WETTED WIDTH	<0.1		23 Dal CHAN	INEL FEATURE:
Z 13.0	0.3		24 900	L
	0.5		25	
4	0.5		26 D15501	LUED EXYGEN:
5 MEASUREMENT	5 0.6			133
6 1.30	0.5		6.54	ppm
7 ABART	0.4			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
8	0,3		n	
9	6,4			
10	0.1			

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best datasheet is true and accurate.	t of my knowledge, that all information reported on this UA
Signed:	Date: 6(25(07
Organization: BWR CORP.	Position: ENV. SCL.

Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
WETTED WIDTH	<0.1		1 CHANNEL.	Co Anjet!
6.5	0.7		2 RUN	PRITION
	0.3		3	
MEASUREMENTS	0.7			oxygen:
0.65 M	0.4		5	(40)
ARART	0.4		6 6.62	Sew
	0-4		7	1 81
	0.4		8	
	0-3		9	
)	<01		10	
	·		11	
HTOIN COTTON	0,1		12 CHANNE	IL FEATURE:
4.7	0.2		13 RON	
3	0.7		14	
4 MERSUREMENTS	6.3		15 PISSOLI	IED OXYGEN:
1.0.47 n	0.7		16	
APART	6.2		17 6.55	ppm
	6.7		18	
8	0.1		19	
1	0.		20	
0	50.1		21	
			22	
			23	
			24	
			25	
			26	
100				
			8	
		/	n	
	455			

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of datasheet is true and accurate.	my knowledge, that all information reported on this UAA
Signed:	Date: 6(25(07
Organization: 3WE COEP.	Position: BA ENV. SC(-
February 5, 2007	Page 25



Upstream (Site 1) of Mulberry Creek.



Downstream (Site 1) of Mulberry Creek.



Upstream (Site 1) of Mulberry Creek.



Upstream (Site 2) of Mulberry Creek.



Downstream (Site 2) of Mulberry Creek.



Downstream (Site 3) of Mulberry Creek.



Upstream (Site 3) of Mulberry Creek.



Upstream (Site 4) of Mulberry Creek



Downstream (Site 4) of Mulberry Creek



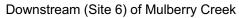
Upstream (Site 5) of Mulberry Creek



Downstream (Site 5) of Mulberry Creek



Downstream (Site 6) of Mulberry Creek





Upstream (Site 6) of Mulberry Creek



Upstream (Site 6) of Mulberry Creek

WBID: 1305, MULBERRY CREEK

THE UPPER REACH OF MULBERRY CREEK, FROM CR 450Z NORTH NEARLY TO HWY J IS MOSTLY IN PROPERTY THAT IS MANAGED OWNED BY THE AMERICAN WILDLIFE ASSOCIATION. WHILE OUR MAPS SHOWED MANY ROADS IN THE AREA, WE WERE UNABLE TO LOCATE THEM IN THE FIELD (MAY HAVE BEEN UNUSED FOR YEARS, OVERGROWN ETC.) ONE ROAD IN PARTICULAR (RUNS PARALLEL TO HWY Y ON THE EAST) WAS GATED AT THE ENTRANCES FROM CR 450Z AND HWY Y. THE POSTINGS ON THE GATES READ NO TRESPASSING 'AWA PROPERTY ETC. THOUGH WE WERE UNABLE TO ACCESS THE CREEK VIA THIS ROAD, WERE WERE ABLE TO COMPLETE A SITE FROM THE BRIDGE CROSSING AT CR 4502. WE THEN DROVE UP HWY Y TO LOCATE THE CREEK BUT WERE UNSUCCESSFUL. (MAY HAVE BEEN DRY). NONETHELESS, THE PROPERTY ALONG HWY Y WAS BOUND BY BAPBED - WIRE FENCES & NO HOUSES WERE NEAPBY.

1501 5. % 52 1 place east Side

Persona 3

Into Creek

In acound

Field Data Sheet for Recreational Use Stream Survey

Data Sheet D—Recreational Use Interview
Stream Name MULBERRY CREEK (WBID # 1305) See 11a
I. Introduction
Date & Time (include AM or PM): 11:03 Am 5-12-07
Interviewed: In person By phone By mail (NOTE: If you are an Interviewee filling out this form to mail back to DNR, proceed to Question #1.)
Interviewee selected because (e.g., house next to stream; standing by stream, etc.) OWN PROPERTY
Interviewer introduction to Interviewee: "My name is, I work for(name of your employer), and I am collecting information on how people use(name of the stream)" ASK: 1.) Are you willing to respond to a survey about this stream? (It will just take a few minutes.)
Yes No If yes, list contact information for the interviewee below: Legal name: Preum Hormann SR. Current mailing address: RR1, Box 784, Amoret, Mo 64722 Daytime phone number: (660) 925-3375 E-mail address (optional):
2.a.) Do you live in this area? Yes No If yes, how many years? Years
2.b.) If you don't live nearby, are you still familiar with this stream? Yes No If yes, how many years? If no, thank the individual for taking the time to talk to you and conclude the interview.
3.) Are you familiar with this particular stretch of the stream? (show them the map, pointing out local landmarks such as roads, bridges, property lines) Yes No If yes, proceed to "II. Personal Use?". If no, proceed to Section V.
II. Personal Use? 1.) Have you or your family personally used the stream for recreation since November 28, 1975? Yes No If yes, proceed to #3. If no, proceed to #2.
2.a.) List reasons stream not used.
2.b.) Proceed to "III. Witnessed Use?".
3.) How do you use the stream?

Field Data Sheet for Recreational Use Stream Survey

Data Sheet D—Recreational Use Interview
Stream Name MULBERRY CREEK (WBID # 1305)
I. Introduction
Date & Time (include AM or PM): 10:30 Am 5-12-67
Interviewed: In person By phone By mail (NOTE: If you are an Interviewee filling out this form to mail back to DNR, proceed to Question #1.)
Interviewee selected because (e.g., house next to stream; standing by stream, etc.) PROACRY
Interviewer introduction to Interviewee: "My name is, I work for(name of your employer), and I am collecting information on how people use(name of the stream)" ASK: 1.) Are you willing to respond to a survey about this stream? (It will just take a few minutes.) Yes No If yes, list contact information for the interviewee below: Legal name:
2.a.) Do you live in this area? Yes No If yes, how many years? 86 913 (been indan, 14)
2.b.) If you don't live nearby, are you still familiar with this stream? Yes No If yes, how many years? If no, thank the individual for taking the time to talk to you and conclude the interview.
3.) Are you familiar with this particular stretch of the stream? (show them the map, pointing out local landmarks such as roads, bridges, property lines) If yes, proceed to "II. Personal Use?". If no, proceed to Section V.
 II. Personal Use? 1.) Have you or your family personally used the stream for recreation since November 28, 1975? Yes No If yes, proceed to #3. If no, proceed to #2.
2.a.) List reasons stream not used.
2.b.) Proceed to "III. Witnessed Use?".
3.) How do you use the stream? WATER CATTLE

Whole Body Contact Recreation
Swimming Tubing Snorkeling/Skin Diving Water Skiing
If Interviewee (or family) used the stream for WBCR since Nov. 28, 1975, ask:
4.a.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)?
4.b.) Where, exactly? Describe specific location and mark on the map (See map requirements in the protocol).
Secondary Contact Recreation
Fishing Wading Boating Trapping Other: List:
If Interviewee (or family) used the stream for SCR since Nov. 28, 1975, ask:
4.c.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)?
men (e.g., year(s)), season, only after a rain!) and now often (times/year)?
4.d.) Where, exactly? Describe specific location and mark on the map (See map requirements in the protocol).
III. Witnessed Use?
1.) Have you observed others using this stream for recreation since Nov. 28, 1975? Yes
If yes, proceed to #2.
If no, proceed to, "IV. Anecdotal Use?".
2.) What kinds of uses have you witnessed?
Whole Body Contact Recreation
Swimming Tubing Snorkeling/Skin Diving Water Skiing
If Interviewee witnessed WBCR use since Nov. 28, 1975, ask the following questions:
2.a.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)?
People fish & boat the Stream when
The Water is Up.

Field Data Sheet for Recreational Use Stream Survey Data Sheet D—Recreational Use Interview MULBERRY CREEK (WBID# Stream Name I. Introduction Date & Time (include AM or PM): 10:14 Am 5/12 Interviewed: In person By phone By mail (NOTE: If you are an Interviewee filling out this form to mail back to DNR, proceed to Question #1.) Interviewee selected because (e.g., house next to stream; standing by stream, etc.) OWNER ADTACENT TO STREAM Interviewer introduction to Interviewee: "My name is _____, I work for __(name of your employer)____, and I am collecting information on how people use __(name of the stream)____." ASK: 1.) Are you willing to respond to a survey about this stream? (It will just take a few minutes.) Yes No If yes, list contact information for the interviewee below: Legal name: Tommy HUTCHINSON!
Current mailing address: PR 1, Box 282, Amoret, Mo 64722 Daytime phone number: (660) 925-3287 E-mail address (optional): 2.a.) Do you live in this area? Yes No If yes, how many years? 2.b.) If you don't live nearby, are you still familiar with this stream? Yes No If yes, how many years? If no, thank the individual for taking the time to talk to you and conclude the interview. 3.) Are you familiar with this particular stretch of the stream? (show them the map, pointing out local landmarks such as roads, bridges, property lines) Yes No If yes, proceed to "II. Personal Use?". If no, proceed to Section V. II. Personal Use? 1.) Have you or your family personally used the stream for recreation since November 28, 1975? Yes No If yes, proceed to #3. If no, proceed to #2. 2.a.) List reasons stream not used.

3.) How do you use the stream? Kids Play & fish in STREAM ITS USUALLY for low for much

February 5, 2007

2.b.) Proceed to "III. Witnessed Use?".